

INDIANA STATE DEPARTMENT OF A G R I C U L T U R E

Food Hubs Feasibility Study

Presented By:

THOMAS P. MILLER & ASSOCIATES

This material is based upon work supported by the United States Department of Agriculture and the Indiana State Department of Agriculture under Award Number 12-25-B-1669.

This report was prepared as an account of work sponsored by an agency of the United States
Government and the State of Indiana. Neither the United States Government or State of Indiana, nor any
agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any
legal liability or responsibility for the accuracy, completeness, or usefulness of any information,
apparatus, product, or process disclosed, or represents that its use would not infringe privately owned
rights. Reference herein to any specific commercial product, process, or service by trade name,
trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement,
recommendation, or favoring by the United States Government, the State of Indiana, or any agency
thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of
the United States Government, the State of Indiana or any agency thereof.



Food Hubs Feasibility Study

May 2015

Table of Contents

Executive Summary	5
Project Overview	7
Regional Assessments	25
Recommendations	41
1. Launch Virtual Indiana Food Hub Network	41
2. Explore Sub-Hub Model for Hoosier Harvest Market	42
3. Streamlining Policies and Procedures	43
4. Marketing Indiana Specialty Crops and Regional Food Hubs	45
5. ISDA Food Hub Planning Resources	45
Appendices	46
Appendix A Are We Ready to Form a Food Hub? A Guide to Food Hub Planning	46
Basic Food Hub Models	48
Model One – Virtual Food Hub	48
Model Two – Wholesale Food Hub	49
Model Three – Community Food Hub and Innovation Center	50
Regional Food Hub Case Studies	51
Are We Ready to Form A Food Hub?	53
Assessment Worksheet for Food Hub Developers	53
Zoning Lessons Learned Regarding Food Hubs: A Study from the Michigan Food Hub Learning Innovation Network	
'APPLE' Five-Phase Food Hub Planning Process:	56
Idea to Implementation in Twelve Months	

Executive Summary

The Indiana State Department of Agriculture (ISDA) received a United States Department of Agriculture (USDA) Specialty Crop Block Grant in 2014 for the development of a feasibility study for food hubs in Indiana. The purpose is to assess the needs of growers and consumers regarding the potential of regional food hubs operating as part of a statewide network to facilitate the marketing and purchase of specialty crops, defined as fruits and vegetables, tree nuts, dried fruits, horticulture, and nursery crops (including floriculture).

As part of the data gathering process, Thomas P. Miller and Associates, LLC (TPMA) facilitated 12 regional input sessions throughout Indiana with participation from a variety of stakeholder groups including producers, community leaders, institutional buyers, elected officials, and economic development organizations. Locations included Batesville, Columbus, Crawfordsville, Elkhart, Evansville, Fort Wayne, Indianapolis, Lafayette, Muncie, New Albany, Valparaiso, and Vincennes.

Surveys were distributed and responses complied from 800+ consumers, 70 Producers, and 10 wholesalers. Additionally, a series of one-on-one interviews with wholesalers, current leadership of food hubs, and institutional buyers were held. This was coupled with research and analysis of specialty crops in Indiana utilizing information from the USDA Census of Agriculture and a review of food hub models/networks from other states.

The research led to the development of the following recommendations:

Launch Virtual Indiana Food Hub Network

An online outlet for connecting efforts and opportunities for networking, sharing ideas, and collaborating on approaches to link regional food hub activities throughout Indiana. Over time, this can build into a library for best practices and planning resources, a calendar of events, and a dedicated staff available for technical services. It will build upon a listserv developed using names of participants from sessions and other contacts identified by Purdue Extension.

Explore Sub-Hub Model for Hoosier Harvest Market

Hoosier Harvest Market in Greenfield, Indiana (Central Indiana) is a well-developed, low start-up cost regional food hub model with an existing online purchasing system. Branding and capacity for the model's organization and technology already exists and is ready to be expanded into other regions throughout Indiana. There is an opportunity to establish "sub-hubs" of the Hoosier Harvest Market, a way to build upon a proven infrastructure to launch regional food hubs. Through this approach, Producers within a county or region will join the Hoosier Harvest Market, regularly post the availability/quantity of their Specialty Crops on the Hoosier Harvest Market website (www.hoosierharvestmarket.com/), and coordinate their own local/regional pick-up and drop-off system.

Streamlining Policies and Procedures

ISDH Requirements for Food Safety and GAP Certification — The ISDA and the Indiana State Department of Health (ISDH) must strengthen the sharing of information about requirements for Producers to sell fruits and vegetables to wholesalers. Currently, ISDH has a dedicated website for the Farm Produce Safety Initiative. This can be incorporated into the ISDA website to better inform

Producers and connect them with available resources such as Food Safety Farm Consultants employed by ISDH that can help them meet FSMA standards and become Registered Growers with the state to sell to wholesalers, restaurants, and institutions.

Designation of Food Hubs — Collaboration between ISDA with ISDH to either establish a new category of state food safety requirements or amend the current language to more clearly include hybrid organizations such as food hubs.

Marketing Indiana Specialty Crops and Regional Food Hubs



Utilize the revamped Indiana Grown program to showcase specialty crops as well as better educate wholesalers and institutional buyers and connect them with Producers. This will be done through the efforts of ISDA to increase the number of specialty crop Producers with Indiana Grown designation. Additionally, promoting a clear definition of a food hub that is understood and adopted by state

and local government, Producers, wholesalers, and consumers will increase awareness, improve marketing opportunities for Indiana specialty crops, and clarify the role that a food hub can play in economic development and the greater Indiana food system.

ISDA Food Hub Planning Resources

Regional food hubs are tools for ISDA to connect with specialty crop growers, large and small. Through its Local Foods Program, a Guide for Food Hub Planning will benefit their outreach efforts and incorporate into ISDA's website and materials available to Producers. This is included as an appendix to the study with the following components:

- Overview of basic food hub models and applicable case studies,
- A food hub readiness assessment worksheet,
- A reference guide for zoning restrictions, and
- A five steps process to planning a food hub.

Project Overview

ISDA contracted with Thomas P. Miller and Associates, LLC in partnership with Prosperity Consulting, LLC to achieve the following outcomes as part of the feasibility study process:

- Identify existing specialty crop production, marketing infrastructure, and potential projected capacity.
- Identify current demand for regionally grown specialty crops through various market channels (retail/wholesale) and determine whether those demands are currently being addressed and met.
- Develop a framework for local marketing strategies.
- Disseminate information to local public officials regarding the significant role that agriculture plays in the state's economy today and for the potential growth and security which can come from agricultural diversification, increasing the number of farmers, adding value to raw farm products, and in the collaboration of farmers, consumers and local government.
- Document the investigation process to serve as a template for future expansions and development in other areas across the state.
- Develop the framework to initiate regional food hubs, either virtual or physical, in targeted locations across the state, with the potential of six to eight aggregation points.
- Identify state and local laws, rules and ordinances relating to food hubs and food distribution in the targeted areas.

The USDA defines a regional food hub as "a business organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen the ability to satisfy wholesale, retail, and institutional demand."

There is not a set structure or framework for a food hub; rather, there are a variety of models that function to meet the needs of producers and the markets they serve. In its Regional Food Hub Resource Guide released in April 2012¹, USDA stressed the role of regional food hubs in the food system based on these key findings from surveys and interviews of currently operating regional food hubs across the United States:

- Regional food hubs are increasing market access for local and regional producers.
- Regional food hubs complement and add considerable value to the current food distribution system.
- Regional food hubs are having significant economic, social, and environmental impacts within their communities.
- The success of regional food hubs is fueled by entrepreneurial thinking and sound business practices coupled with a desire for social impact.

¹ http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5097957

Specialty Crops in Indiana

While specialty crops are grown in Indiana, they are not the dominant activity driving the agriculture economy. Based on data from the 2012 USDA Census of Agriculture:

- Indiana has 58,695 farms and \$11.21 Billion in total sales.
- Only 2.4 percent of farms in Indiana grow vegetables, melons, potatoes, and sweet potatoes (1,399 farms). This accounts for 0.9 percent of total sales (\$104.4 Million).
- Only 1.5 percent of farms in Indiana grow nursery, greenhouse, floriculture, and sod (888 farms). This accounts for 1.0 percent of total sales (\$110.8 Million).
- 1.0 percent of farms in Indiana grow fruits, tree nuts, and berries (600 farms). This accounts for 0.1% of total sales (\$10.9 Million).

When looking at how Indiana performs nationally:

- Indiana sources an estimated 90+ percent of its food from out of state, yet the Hoosier state has the 7th largest market value of crops when ranked among the 50 states (over \$7.5 Billion in 2012).
- Indiana ranks 30th in specialty crop acreage with 63,252 acres in specialty crops; of that acreage, the highest proportion is in vegetables, melons, potatoes, and sweet potatoes (59.3 percent; 37,498 acres) in which the state ranks 21st nationally.
- Indiana ranks 30th in the number of farms growing specialty crops with 2,935 farms.
- Indiana ranks 23rd in the total market value of specialty crops (\$587 Million).

The charts below show the concentration of activity in Indiana by county.

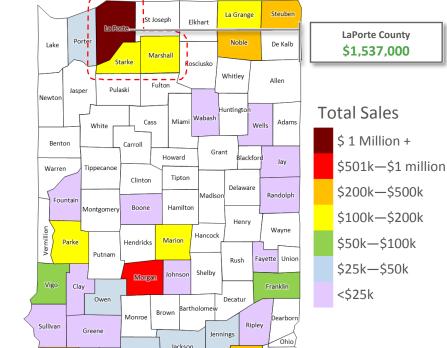
Fruits, Nuts, and Berries			
County	Sales		
LaPorte	\$1,537,000		
Morgan	\$546,000		
Noble	\$333,000		
Jefferson	\$237,000		
Knox	\$235,000		
Steuben	\$217,000		
Harrison	\$177,000		
LaGrange	\$145,000		
Starke	\$128,000		
Kosciusko	\$121,000		

Vegetables, melons, potatoes,		
and sweet potatoes		
County Sales		
Knox	\$25,055,000	
LaPorte	\$9,973,000	
Sullivan	\$5,641,000	
LaGrange	\$3,998,000	
Grant	\$3,740,000	
Elkhart	\$3,234,000	
Cass	\$2,602,000	
Porter	\$2,487,000	
Lake	\$1,933,000	
Bartholomew	\$1,923,000	

Nursery, greenhouse, floriculture, and sod		
County	Sales	
Hamilton	\$26,755,000	
Madison	\$7,803,000	
Tippecanoe	\$4,324,000	
Elkhart	\$3,422,000	
Delaware	\$3,268,000	
Allen	\$3,106,000	
Hendricks	\$2,754,000	
Marshall	\$2,605,000	
Lake	\$2,512,000	
St. Joseph	\$2,104,000	

Source: 2012 USDA Census of Agriculture

Sales of Fruit, Tree Nuts, Berries



Switzerland

The highest concentration of 2012 sales in fruit, tree nuts, and berries is in LaPorte County in Northwest Indiana with \$1,537,000 in sales. There are a number of blueberry and strawberry farms in the area (e.g. Blueberries of Indiana, Blue Sky Berry Farm, and Blossoms Blueberries). Neighboring Starke County and Marshall County have over \$100,000 in sales. Morgan County ranks second in the state in sales with \$546,000. It is home to a number of orchards including Anderson Orchards and Gregory Orchards.

Indiana had over \$110.8 million in 2012 sales Nursery, Greenhouse. Floriculture, and Sod. The largest concentration is in Central Indiana. Hamilton County led the state with \$26,755,000 in sales due to the presence of large wholesale nursery and greenhouse operations including Heartland Growers in Westfield. Madison County ranked second with \$7,803,000 due to the presence of operations such as Blue Grass Farms in Anderson.

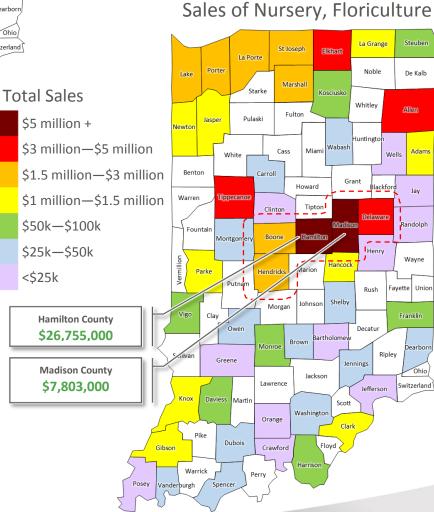
Lawrence

Orange

Crawford

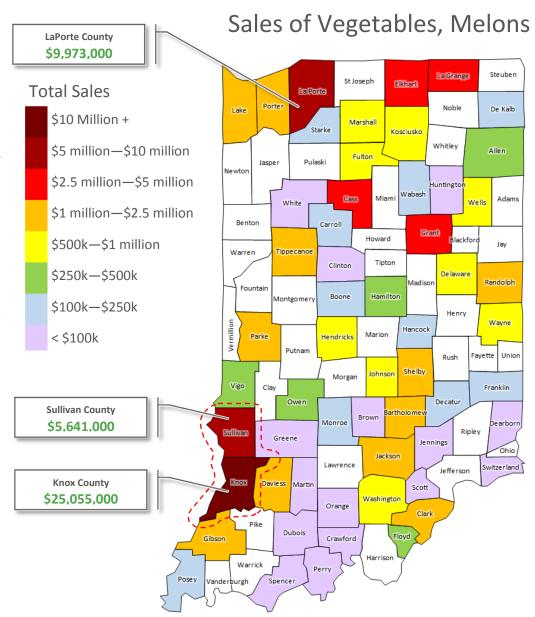
Daviess Martin

Dubois



Knox County had the highest amount of 2012 sales in vegetables, melons, potatoes, and sweet potatoes with \$25,055,000. There is a high concentration of melon farming with large operations such as J&J Farming Co., Melon Acres, and Williams. These three farms collaborate and jointly own the Oaktown Produce Depot, a cleaning and packing plant for cantaloupes. cantaloupes are marketed under the Hoosier Fresh Farms name and sold to major grocery chains including Kroger and Meijer (see link:

http://hoosierfreshfarms.com/).



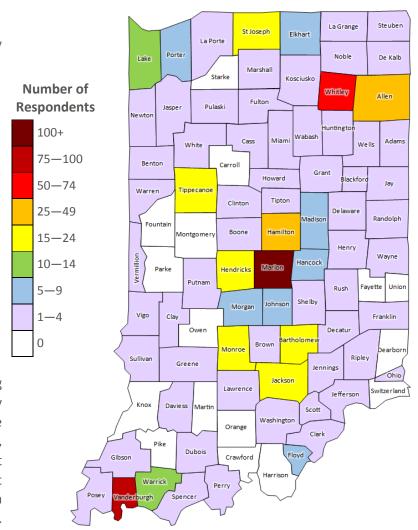
Public Input

A statewide survey of consumers, producers, and wholesalers in Indiana was conducted to assess several data points with respect to specialty crops and food hubs. Survey invites and participation requests were distributed through regional input sessions, social media and web-based platforms, and through handouts at local farmers' markets and the Indiana State Fair. Questions in these surveys were in the form of multiple choice and open response.

Consumers

At just over 800 responses, consumers by far had the greatest response rate of the three surveyed groups. Many of the consumer responses were sourced from farmers' markets and the state fair, and provided a significant amount of data surrounding several important areas. The chart to the right illustrates the spread of responses by county, and helps to provide visualization of which areas were more active in their response.

Marion County had the most responses by a large margin, but this can be attributed to the large number of surveys distributed at the State Fair. It only stands to reason that there was likely a higher number of Marion County residents that received these flyers. To that note, however, the State Fair setting was instrumental in providing survey exposure to residents across most of the Indiana counties. Interestingly enough, Vanderburgh — one of the southernmost counties — had the second greatest response rate, with Whitley County — a northern county — having the third greatest.



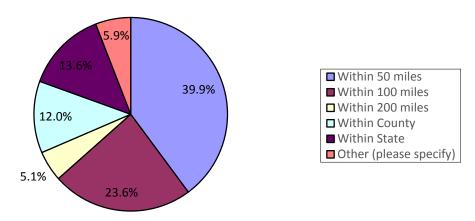
Consumer Data Points

The consumer survey provided a large amount of information that illuminated consumer purchasing habits as they relate to locally grown specialty crops. Consumers were asked a number of different questions relating to specialty crops that they purchase, their definition of locally grown, their preferred method for making purchases, and their perspective on priorities for food hub design.

Locality

To establish what it means to choose local food, it was necessary to first assess what consumers defined as local. 39.9 percent of respondents indicated that local meant within 50 miles of its source.

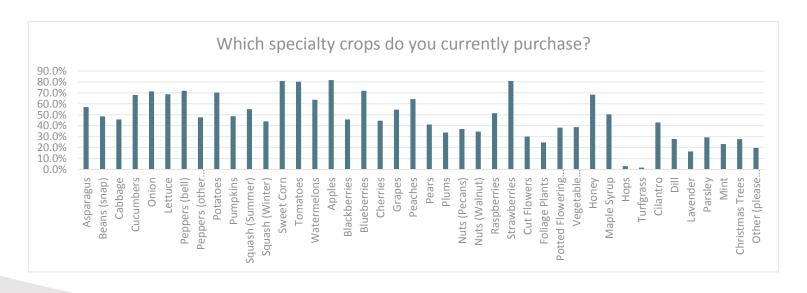




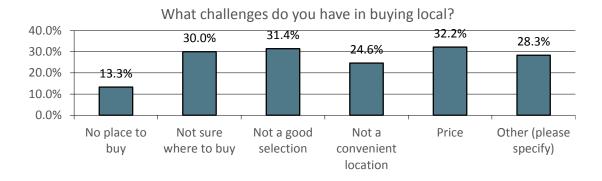
Respondents listing "Other" were asked to specify what their definition for local was. Several respondents identified that they defined local low as within 10 - 20 miles, but frequently cited that it is dependent on the crop that is being purchased. A large theme seemed to be the concept of regionalism, as several individuals stated that state lines shouldn't make a difference on 'locality' – Illiana, Michiana, and Kentuckiana being examples of this.

Specialty Crops

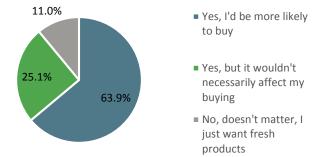
Survey data shows that many Hoosiers identified purchasing a broad variety of Indiana specialty crops. This variety could play heavily into regionalism as some areas specialize in particular crops to a greater degree than others. The highest response rates (over 80 percent) were for apples, strawberries, sweet corn, and tomatoes.



When looking at the challenges of buying local, consumers ranked price as the highest factor (32.2 percent) followed by not a good selection (31.4 percent), and not sure where to buy (30.0 percent).



Would it matter to you if products are actually grown in Indiana?



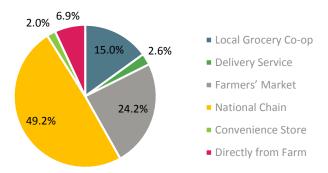
Consumers were also asked if it would matter if products are actually grown in Indiana. Sixty-four percent of the respondents identified that it does matter, and that they would be more likely to buy if they knew that the products were sourced within the state. One quarter of the respondents stated that it would matter, but wouldn't affect their buying, and another 11 percent said that they don't care as long as the products are fresh.

Purchasing Habits

Preferred Method of Purchasing

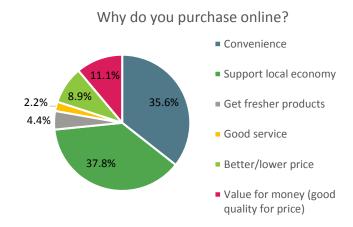
According to the consumer survey, approximately half of Indiana consumers purchase a majority of their vegetables, fruits, nuts, herbs, and flowers through a national chain. A quarter of the respondents stated that they purchase a majority of these items at local farmers' markets, and 15 percent of respondents were those who purchased at local grocery co-ops. The smallest pool of respondent said that they purchase their vegetables, fruits, nuts, herbs, and flowers at local convenience stores.

Where do you do a majority of your shopping for vegetables, fruits, nuts, herbs, and flowers?



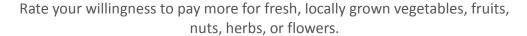
Purchasing Online

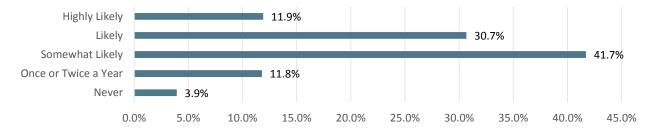
Some food hubs, such as the Hoosier Harvest Market in Central Indiana, incorporate an online purchasing system to conduct their food hub operations. When asked if they ever purchase specialty crops online, 90 percent responded 'No'. Those that answered yes did so mostly out of convenience and supporting the local economy — a large benefit that regional food hubs could provide. Of those that do purchase produce online, 75 percent indicated that they were aware of where the products were sourced from.



Price and Access

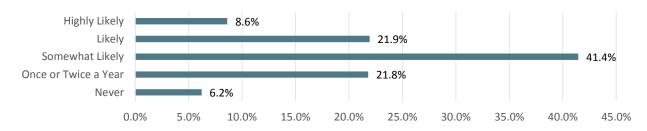
Consumers were somewhat likely (41.7 percent) or likely (30.7 percent) to pay more for locally specialty crops.





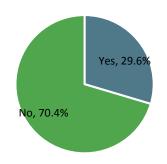
When looking at a willingness to drive further for specialty crops, 41.4 percent were somewhat likely, 21.9 percent likely, and 21.8 percent likely once or twice a year.

Rate your willingness to drive farther to buy locally grown vegetables, fruits, nuts, herbs, or flowers.



Food Hub Familiarity

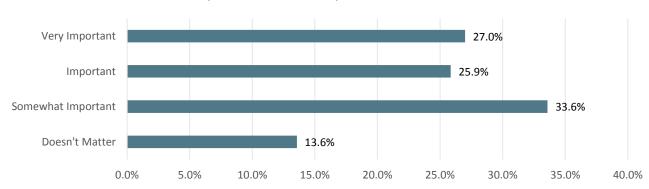
Were you previously familiar with the term "Food Hub"?



Only 30 percent of Indiana consumers were familiar with the term "food hub" prior to taking the consumer survey. This indicates a need for information sharing and "educating" on a statewide level if a food hub system is to be feasible. With further education, the below responses could change as well.

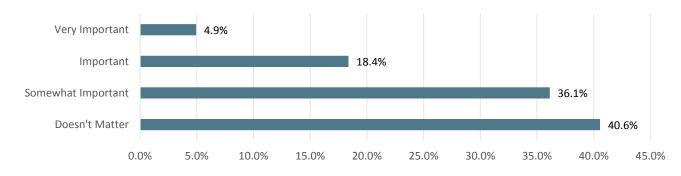
When asked about the importance of a food hub offering specialty crops at a lower price, 33.6 percent indicated it was somewhat important, 27.0 percent indicated it was very important and 25.9 percent indicated it was important.

I'm more likely to buy vegetables, fruits, nuts, herbs, or flowers at a food hub if products were cheaper than in stores.



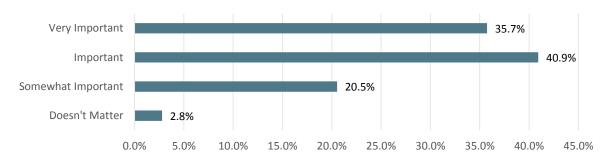
When looking at the presence of a food hub in a nice retail area, 40.6 percent of consumers indicated that it didn't matter and 36.1 percent said it was somewhat important.

I'm more likely to buy vegetables, fruits, nuts, herbs, or flowers at a food hub if it is located in a nice retail area with amenities.



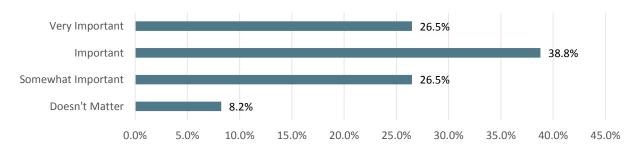
When asked about the importance of knowing that specialty crops are locally grown through a food hub, 40.9 pecent indicated it was important and 35.7 percent said it was very important.

I'm more likely to buy vegetables, fruits, nuts, herbs, or flowers at a food hub if I know that they were locally grown.



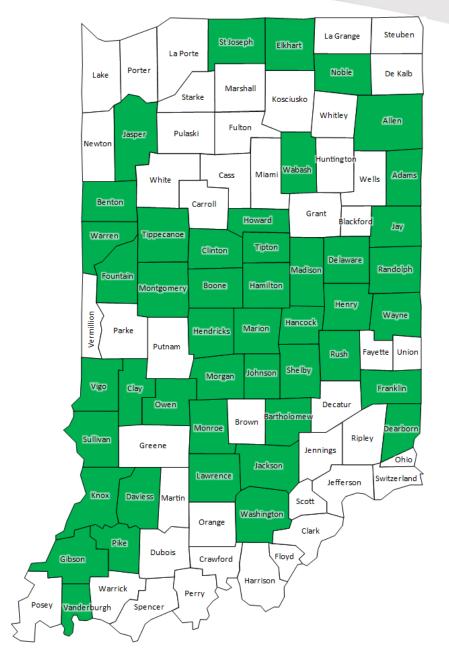
When asked about specialty crops being inspected to a certain quality, 38.8 percent indicated it was important, 26.5 percent indicated it very important and 26.5 percent indicated it was somewhat important.

I'm more likely to buy vegetables, fruits, nuts, herbs, or flowers at a food hub if I know food was inspected to a certain quality.



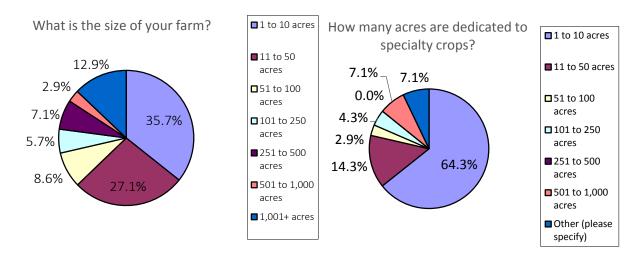
Producers

A total of 70 producers represent 43 different counties across the state with their responses to the producer survey that was distributed. Though fewer in number of respondents than that of the consumer survey, the producers provided valuable insight and information about their current operations, where they typically sell their products, and their opinions on distributing through local and regional food hubs.



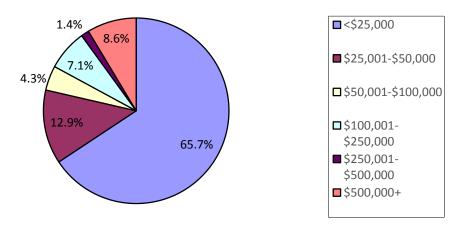
Characteristics of Farms

Of producers who responded, 35.7 percent had operations of 1-10 acres, followed by 27.1 percent with 11-50 acres, and 12.9 percent with operations over 1,001+ acres. Of those operations, 64.3 percent were dedicating 1 to 10 acres to specialty crops with 14.3 percent dedicating 11-50 acres.



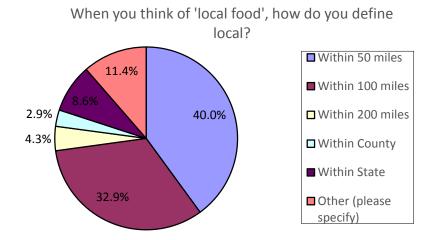
When asked about sales of specialty crops, 65.7 percent of producers who responded indicated sales were under \$25,000.





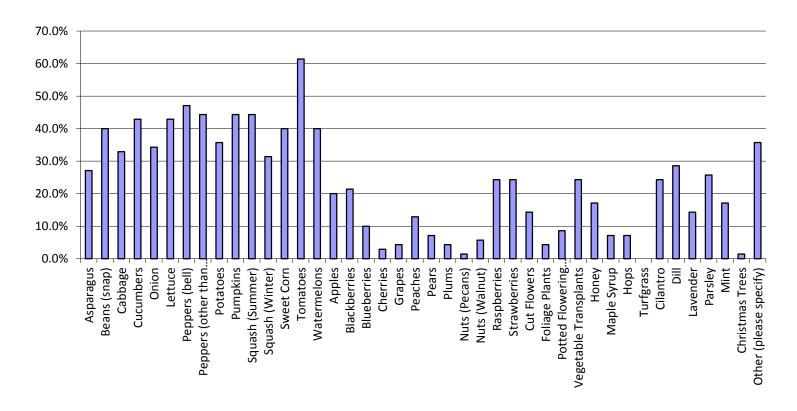
When asked if farming was their full-time occupation, 60.0 percent indicated no and 40.0 indicated yes. When asked how many additional staff they employ, 45.7 percent indicated they employ 1-5 additional staff and 38.6 percent indicated they do not employ additional staff.

When asked to define local, 40.0 percent of producers indicated that they defined it as within 50 miles followed by 32.9 percent within 100 miles.

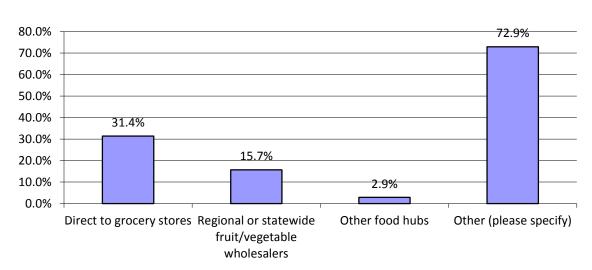


Specialty crops grown by a high number of producers included tomatoes, peppers (bell), peppers (others), pumpkins, squash, cucumbers, and lettuce.

What specific specialty crops do you grow and sell to market?



When asked about specialty crops being currently sold to wholesalers, 31.4 percent indicated they were selling direct to grocery stores and 15.7 percent to regional or statewide fruit/vegetable wholesalers. 72.9 percent responded "other" which included lots of participation in farmers markets and some direct sales to restaurants.



Are you selling your specialty crops to any wholesalers now? If so, who?

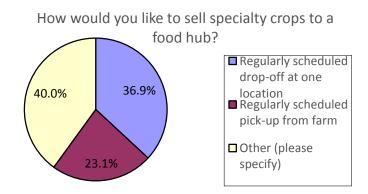
Indiana Grown – when asked about familiarity with the Indiana Grown program, 40.0 percent of producers were aware of the program and 60.0 percent were not aware of the program.

Term 'Food Hub' – when asked about familiarity with the term Food Hub, 64.6 percent indicated they had heard the term and 35.4 percent indicated they were not familiar with it.

Currently Selling to a Food Hub – when asked if they currently participate in a food hub, on 7.7 percent of those who responded to the question indicated they were.

Best Way to Sell to a Food Hub -

When asked about selling specialty crops to a food hub, 36.9 percent indicated that they would like to participate in a regularly scheduled drop-off at one location and 23.1 percent indicated they would like a regularly scheduled pick up from a farm.

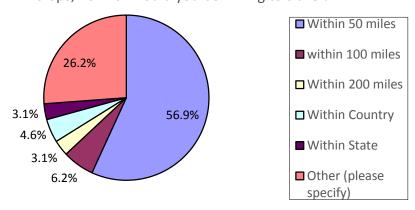


When reviewing the other comments on how producers would like to participate, key items that emerged included:

- Regularly scheduled drop-off *and* pick up.
- No interest in food hub.
- Have trucks that pick-up from farms and drop off to retailers and wholesalers on a daily basis year round.
- It would depend on distance to the drop-off. It would depend on the cost of the pick-up. Can we make a living selling to a food hub, with the wholesaler fee and extra fees from logistics?
- Rarely have enough extra of a single product to participate.

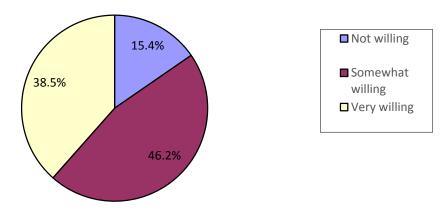
When asked about how far they would be willing to travel to a single location to sell specialty crops, 56.9 percent said within 50 miles.

If there were a single location to sell your specialty crops, how far would you be willing to travel?



When asked about their willingness to set aside a portion of specialty crops grown for a food hub, 46.2 percent were somewhat willing, 38.5 percent very willing, and 15.4 percent not willing.

How willing would you be to set aside a portion of your specialty crops to market them at a food hub?



When asked about the barriers to selling specialty crops now, producers provided the following inputs:

- Marketing lack of time to dedicate to marketing efforts and obtaining new customers.
- Consumer Education challenges with consumers understanding what "in season" means.
- **Surplus of Product** coming in from neighboring states and competition at local farmers markets, some with low customer base (too much produce for the market).
- Working with Grocery and Super Stores challenging for small producers to sell to them with enough volume and being able to get competitive prices.
- Labor costs funding to pay for staff and lack of adequate labor force to harvest specialty crops.
- Seasonality access to a consistent season-long market with less price variability.
- Land and Infrastructure finding affordable land to expand and finances to build the appropriate infrastructure (coolers, storage, processing) and have people power at the needed times.

Wholesalers

A combination of surveys and one-on-one interviews were completed with wholesalers. There were a total of ten surveys completed with the following responses:

Where Procurement Decisions are Made	Central Indiana (5)	
	Northwest Indiana (3)	
	Northeast Indiana (1)	
	 South Central Indiana (1). 	
Define Local	Within 200 miles (2)	
	Within State (2)	
	 Within 100 miles (1) 	
	Within 50 miles (1)	
	 Other (4) – wherever we can back haul 	
	from; 400 mile USDA definition;	
	Regional, independent family	
	producers; do not use.	
Local Purchases of Specialty Crops	 Less than 10 percent (3) 	
	• 11-15 percent (1)	
	 16-20 percent (2) 	
	 26-30 percent (1) 	
	• 31-40 percent (1)	
	 91-100 percent (2) 	
Wholesalers Current Market for Indiana Specialty	 Less than \$50,000 (5) 	
Crops	• \$100,001-\$250,000 (3)	
	• \$1,000,000+ (2)	
Estimate of current size of Local Food Market for	r • Less than \$1 million (3)	
Specialty Crops in Indiana	• \$100+ million (2)	
	• \$1-5 million (1)	
	• \$6-10 million (2)	
	• \$11-25 million (1)	

	• \$51-100 million (1)	
Interest in Sourcing More Local Foods	 Very Interested (6) 	
	 Somewhat Interested (2) 	
	We do not have the flexibility to	
	source locally (2)	
Working with a Food Hub	 As a Wholesale Buyer (5) 	
	 As a Cooperative (2) 	
	As a Co-Owner (1)	
	• N/A (2)	

Summary Findings

The Term "Food Hub"

- Understanding how the state wants to define the term and possibly create standard operating procedures (SOPs) behind recognizing an entity as a food hub.
- Communicating to producers to help them clearly understand what a food hub is, how they can participate, and the potential monetary value for participation.
- Understand the margins and realistic expectations let producers know what they are getting into, requirements for participation (e.g. GAP certification, etc.) and how they can/cannot make money.

Food Safety and Regulations

- Streamline the process ISDA can be a one-stop shop for information on certifications and adhering to regulations and provide help in accessing those resources.
- Definition of regulatory category for food hubs not case by case but clearly defined category to simplify across the state and avoid varying levels of recognition across county departments of health.

Wholesalers and Working with Food Hubs

- They do have an interest in purchasing locally/Indiana-raised, but they insist on necessary certifications, volume, and product pricing that is comparable to other sources whey already have access.
- They recommend examining successful examples working with organized food hubs in other states that have these elements in place just another channel for them to work through.
- Opportunities exist for backhauling can bring items from one part of the state to another using existing routes working with food hubs.
- The existing wholesale network could aid in education that producers need regarding the wholesale industry and possibly help build knowledge capacity among farmers and hub organizers.

Institutional Buyers (Hospitals/Universities)

- Value having a wholesaler/distributor that provides reliable access, product variety, product volume, competitive pricing, and necessary certifications.
- Food hubs can be part of this if they have these items in place.
- Most institutional buyers said they still want to buy through their existing wholesaler.

• Institutional buyers will be an extremely challenging customer for a new food hub or even a food hub network.

Farm to School (Public and Private K-12)

- Help educate their food buyers to understand realistic specialty crops that schools can purchase, volume, and what time of year plan accordingly to work with the school corporation.
- Educate producers on necessary food safety requirements and regulations.
- ISDA could assist with promotion about Farm to School and knowledge about farm to schools.
- An opportunity exists to learn more about this area: There is so much we don't know; the census
 is a base point, but we still don't know what schools are doing. There could be an additional study
 and work to find out specifically what schools are doing and where they would go with food hubs.
- There could be more/faster/easier access to this wholesale market directly from a food hub than the institutional buyer.

Education to Producers

- Understand the price of admission necessary requirements, volume, etc.
- Small producers express distinct interest in food hubs, larger producers already selling wholesale not as much.

Challenges with Specialty Crops

- Available workers for picking labor intensive process, challenging to source trained workers.
- Not enough volume of specialty crops in Indiana relying on products from other states (primarily Michigan to fill in orders).
- Convincing conventional corn/soybeans/livestock producers to diversify their crop mix by adding specialty crops or adding specialty crops is not easy.

Support from ISDA

- Producers widely see a possible role of ISDA is one of helping them understand regulations and requirements assistance taking producers through the process to better understand Good Agricultural Practices (GAP) and in building wholesaler relationships/contracts.
- Marketing assistance from the state continue to push specialty crops and what is grown in Indiana and connect growers with buyers.
- Setting up the model for how to create a food hub, spreading the word about how they work, and
 making it easier for groups that want to organize to put their own hubs together and enable a
 way for them to interact or network. The idea that ISDA provides templates or examples is
 commonly desired.

Value of the Food Hub Network

- Mentoring opportunities new foods hubs paired with existing food hubs.
- Promote Indiana Grown name recognition and marketing for Indiana specialty crops.
- Backhauling way to coordinate linkages with distributors and other food hubs to connect transportation of specialty crops throughout Indiana.
- Identify champions within each region as output from this study accelerate implementation of the concept.
- Online retail another avenue, one-stop convenience.

Regional Assessments

Food Hub Activities in Indiana

A large portion of the data gathered for this report was obtained from 12 different regional input sessions conducted across the state of Indiana. These sessions, conducted with the assistance of the respective Purdue Extension Educators, were a key component of assessing the feasibility of food hubs and readiness of the various regions. Input sessions were conducted in:

Location	Date	Attendees
New Albany	August 26, 2014	11
Batesville	August 27, 2014	6
Indianapolis	August 27, 2014	15
Fort Wayne	August 28, 2014	24
Columbus	September 4, 2014	22
Evansville	September 4, 2014	13
Lafayette	September 9, 2014	8
Muncie	September 9, 2014	21
Elkhart	October 7, 2014	14
Crawfordsville	October 9, 2014	12
Valparaiso	October 24, 2014	6
Vincennes	November 20, 2014	30

Each region reflected its own degree of readiness to move forward with a food hub project. Thus, the categories of **established**, **planning**, **emerging or exploratory** were created and are defined below.

Established	Region has existing food hub in place and champion(s) identified
Planning	Food hub study or local food systems planning is in progress with a regularly meeting group and champion(s) identified
Emerging	Significant amount of local or regional interest and searching for the next step
Exploratory	Preliminary food hub discussions, region is interested in the concept but only based on initial meetings

Established Regions

Central Indiana/Greenfield | Hoosier Harvest Market

The Hoosier Harvest Market is an online marketplace of food sourced locally, such as produce, meats, eggs, cheeses, wheat products, flowers, honey, and more. All products are grown or produced throughout the state of Indiana, and the Hoosier Harvest Market provides a unique opportunity for producers and customers alike to have easy access to local products.



<u>www.hoosierharvestmarket.con</u>

Assets

Hoosier Harvest Market has recently added additional pick-up locations, expanding its reach to 13 different areas throughout Central and Eastern Indiana. The pickup locations stretch from Downtown Indy as far east as Spiceland in Henry County, and New Palestine in Hancock County up to Fishers in Hamilton County.

There has been interest and initiatives from institutional buyers such as Eskenazi Health, the Metropolitan School District of Warren Township, Dig IN, Local Growers Guild, and Indiana Family of Farmers.

Challenges

Hoosier Harvest Market will need to determine how to effectively expand its operations. Some things that will be taken into consideration are a warehousing need, retail space, refrigerated vehicles, cold storage and more.

Opportunities

The producers and consumers of Hoosier Harvest Market would benefit from the acceptance of EBT/SNAP benefits. Furthermore, planning for the expansion of the Hancock County Fairgrounds (i.e. XPLEX) provides the potential for available dedicated processing/packaging space.

ISDA Support

The ISDA will need to provide classification of food hubs for regulations, as well as provide information on opportunities for backhauling with wholesalers. There will need to be support with recruitment of producers and planning for consumer demand, as well as education for consumers and restaurant owners regarding how seasonality affects availability of product.

The Hancock County region includes Marion, Hamilton, Madison, Henry, Rush, Shelby, and Johnson Counties.

Hancock Cou	nty	Region
Total Number of Farms (2012)	604 farms	4,604 Farms
Land in Farms (2012)	165,861 acres	1,117,804 Acres
Average Size of Farm (2012)	275 acres	243 Acres
Value of crops including nursery and greenhouse (2012)	\$92,471,000 (40 th in Indiana out of 92 counties)	\$600,796,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$236,000 (48 th in Indiana)	\$2,361,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed	\$115,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$1,047,000 (27 th in Indiana)	\$35,932,000
Population (2013)	71,575 people	1,683,343 People



South Bend | Purple Porch Co-op

In February of 2013, Purple Porch Co-op evolved from a weekly market, started in 2009, to a full-time store and market in downtown South Bend. At the facility, customers can dine-in for breakfast, lunch, or dinner prepared by the staff at Purple Porch as well as purchase fresh food sourced from local producers.



www.purpleporchcoop.com

Assets

With nearly 500 members, the co-op and retail store sources from between 16-40 local producers depending on the time of the year. Purple Porch customers can pre-order via website (https://www.localfoodmarketplace.com/purpleporch/Register.aspx) and pick up at the store. Their mission emphasizes organic and sustainably grown products and defines local as within 60 miles of the retail store (crosses into Michigan).

Challenges

Connecting with producers; the availability of products from local producers – they have to supplement with items from other areas due to lack of specialty croup availability; how to effectively grow as a co-op.

Opportunities

Received a two-year, \$100,000 grant from USDA focused on food promotion that will focus on connecting with more producers, also purchasing a walk-in cooler. They are involved in some wholesaling to local restaurants and a day care center. They are exploring opportunities with regional colleges and universities (e.g. University of Notre Dame).

ISDA Support

Statewide clearinghouse providing information on producers and specialty crops they grow.

The St. Joseph County region includes LaPorte, Starke, Marshall, Elkhart and Kosciusko counties.

St. Joseph Cou	unty	Region
Total Number of Farms (2012)	691 farms	4,058 Farms
Land in Farms (2012)	151,975 acres	974,452 Acres
Average Size of Farm (2012)	220 acres	240 Acres
Value of crops including nursery and greenhouse (2012)	\$106,901,000 (33 rd in Indiana out of 92 counties)	\$593,835,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	Not Disclosed (24 th in Indiana)	\$11,229,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed (3 rd in Indiana)	\$1,887,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$2,104,000 (13 th in Indiana)	\$7,187,000
Population (2013)	266,709 people	526,259 People

Colfax | This Old Farm

First started in 200, This Old Farm's aim was to bring fresh food to area families from the 88-acre farm owned by Erick and Jessica Smith. Since then, they have expanded into processing locally raised meats. They represent 20 different farms through an area farm alliance in an effort to bring locally sourced food to commercial markets, as well. Through the alliance, they have grown large enough to supply most commercial, school, or wholesale needs for fresh, locally-sourced food.



Assets

This Old Farm serves as an aggregation point for regional producers. They sell to wholesalers (estimated 90% of revenue) and through online orders (see http://shop.thisoldfarminc.com/). For their operation, they estimate only 10 percent of business is focused on specialty crops (e.g. potatoes, green beans, romaine lettuce).

Challenges

need of wholesalers. Education about GAP to wholesalers.

Opportunities

Lack of specialty crop volume in Indiana to meet the Received a USDA Value-Added Producer Grant to conduct a feasibility study on chopped lettuce as a certification and requirements for producers to sell value-added product in a 400-mile radius in Central Indiana. The intent is to work with school markets; expansion into produce processing.

ISDA Support

The ISDA can provide support by educating producers about specialty crops and making investments in existing infrastructure for aggregation and distribution within the state.

The Clinton County region includes Tippecanoe, Carroll, Howard, Tipton, Hamilton, Boone, and Montgomery counties.

nty	Region
597 farms	4,580 Farms
223,428 acres	1,576,595 Acres
374 acres	344 Acres
\$178,602,000 (4 th in	\$1,082,351,000
Indiana out of 92 counties)	\$1,082,331,000
\$46,000 (79 th in Indiana)	\$1,960,000
	\$1,900,000
Not Disclosed	\$18,000
	\$10,000
\$179,000 (59 th in Indiana)	\$34,008,000
	734,000,000
32,916 people	726,933 People
	597 farms 223,428 acres 374 acres \$178,602,000 (4 th in Indiana out of 92 counties) \$46,000 (79 th in Indiana) Not Disclosed \$179,000 (59 th in Indiana)



Planning Regions

Batesville

Batesville has some current initiatives in place for local institutions such as schools and the Margaret Mary Community Hospital to purchase a certain percentage of locally-grown food. There was a lot of emphasis on the importance of 'regionalism' for the Batesville area due in part to the small number of producers in the immediate area. To make a project like this sustainable, there would have to be 'regional spillover' to fill the gaps from a lack of supply.



Assets

The Batesville area has an active group, the Food and Growers Association of Laughery Valley, which was selected as a pilot community for Purdue Extension's Rebuilding Your Local Food System program. An emerging opportunity to receive direct consultation from Hoosier Harvest Market for modeling and organizing is underway.

Challenges

Honing in on the right model, with particular regard to institutional vs. retail sales. Batesville producers may also have a difficult time finding enough volume for ongoing purchases by institutional buyers.

Opportunities

Batesville is situated between Indianapolis and Cincinnati and has buy-in from Margaret Mary Hospital and local school corporations. The Food and Growers Association of Laughery Valley received a grant from Cincinnati-based Interact for Health for regional outreach and education on producer diversification in collaboration with Hoosier Harvest Market.

ISDA Support

ISDA can provide support by educating producers on the value and return on investment for participating in the food hub. It can also assist in building the grower capacity and the market at the same time. Support from ISDA to market specialty crop promotional programs and help them recruit growers is of interest.

The Franklin County region includes Union, Fayette, Rush, Decatur, Ripley and Dearborn counties.

Franklin Cour	nty	Region
Total Number of Farms (2012)	727 farms	3,964 Farms
Land in Farms (2012)	124,960 acres	895,077 Acres
Average Size of Farm (2012)	172 acres	226 Acres
Value of crops including nursery and greenhouse (2012)	\$42,592,000 (69 th in Indiana out of 92 counties)	\$388,564,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$135,000 (55 th in Indiana)	\$281,000
Value of Sales in Fruits, tree nuts, and berries (2012)	\$82,000 (30 th in Indiana)	\$119,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$608,000 (35 th in Indiana)	\$945,000
Population (2013)	22,951 people	175,693 People



Elkhart County

Elkhart County has several early initiatives that would tend to express that there is a public interest in retail of locally-sourced produce. Many of the barriers to establish an actual food hub system or facility essentially boiled down to financial constraints, liability to the local producers and food hub alike, and a lack of processing capability for cutting fruit and vegetables.



www.foodshed.info

Assets

Elkhart County Foodshed Initiative is an ad-hoc group focused on strengthening the county's food system. They were selected as a pilot community for Purdue Extension's Rebuilding Your Local Food System program, meet regularly, and have set up a website (http://foodshed.info/). The county is also home to the Maple City Market co-op.

Challenges

of cold storage space. They don't have a clear understanding of available warehousing space; Currently, they do not have the processing capability for cutting fruit and vegetables.

Opportunities

Funding for ongoing operations of a food hub Concept of processing and freezing local fruits and including financing to construct (if applicable). Lack vegetables at the Elkhart County Jail. Continuing the efforts of the Elkhart County Foodshed Initiative.

ISDA Support

ISDA can leverage dollars to promote action linked to food hubs and specialty crop production. It can help establish a unified regulatory application by consolidating forms from multiple agencies. Through legislation, it can advocate for utilization of locally-grown specialty crops. ISDA can also provide technical assistance to identify what school corporations are interested in Indiana food sourcing and linking them with regional producers.

The Elkhart County region includes St. Joseph, Marshall, Kosciusko, Noble, and LaGrange counties.

Elkhart County		Region
Total Number of Farms (2012)	1,724 farms	8,122 Farms
Land in Farms (2012)	172,847 acres	1,171,558 Acres
Average Size of Farm (2012)	100 acres	144 Acres
Value of crops including nursery and	\$83,229,000 (44 th in	\$513,787,528
greenhouse (2012)	Indiana out of 92 counties) \$3,234,000 (7 th in Indiana)	
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$3,234,000 (7 m in maiana)	\$8,488,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed	\$700,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$3,422,000 (7 th in Indiana)	\$10,224,000
Population (2013)	200,563 people	677,910 Acres



Bloomington

Bloomington Indiana is no stranger to the retail of locally-sourced produce, and has a number of producers in the area of all types of backgrounds. They have begun discussing the potential of a food hub based on another hub's model, and have a large asset base by means of producers and public interest alike.



Assets

Discussions are underway around the Cooperative Partners Warehouse (CPW) model from Minneapolis (http://www.cooppartners.coop/). The focus is on working with five or six regional producers and how they can efficiently supply co-ops, including Bloomingfoods in Bloomington and the Lost River Co-op in Paoli.

Challenges

Competing initiatives and prioritizing best model Proven model from Minneapolis - interest from for producers.

Opportunities

producers that have supplied and could strengthen collaboration to improve profitability.

ISDA Support

Expressed interest in sharing information on their efforts. Committed to a particular model with assistance from the Kentucky Center for Agriculture and Rural Development (KCARD).

The Monroe County region includes Owen, Morgan, Brown, Jackson, Lawrence, and Greene counties.

Monroe County		Region
Total Number of Farms (2012)	462 farms	4,121 Farms
Land in Farms (2012)	52,762 acres	799,721 Acres
Average Size of Farm (2012)	114 acres	194 Acres
Value of crops including nursery and greenhouse (2012)	\$8,672,000 (88 th in Indiana out of 92 counties)	\$228,377,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$141,000 (52 nd in Indiana)	\$2,114,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed	\$659,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$638,000 (34 th in Indiana)	\$1,280,000
Population (2013)	141,888 people	369,985 People



Emerging Regions

Evansville

A food hub could be the ideal gap-filler between restaurants and local producers since restaurants currently lack a supply structure that would make local purchasing feasible. Furthermore, the food hub would have to set up a system in which they could accept SNAP EBT cards. The biggest hurdle in making a food hub a success is getting the consumer to change their purchasing habits. Evansville has also identified that they struggle with regional competition from Kentucky and re-sellers of Kentucky produce in Indiana.



Assets

Welborn Baptist Foundation and Healthy Communities Partnership completed a campaign in 2014 to promote eating local fruits and vegetables. There is current collaboration with Warrick County Schools and local producers. The River City Food Co-op operates in Evansville.

Challenges

Good Agriculture Practices (GAP) training and food safety with producers is going to be a considerable challenge. Struggle with heavy regional competition from Kentucky, much of it coming through resellers.

Opportunities

Developing and implementing online model like Hoosier Harvest Market; Support and continued interest from the Welborn Baptist Foundation. A retail online model is being considered with possible collaboration and education from Hoosier Harvest Market.

ISDA Support

ISDA can provide mentoring from successful models and financial support. It can also provide assurance that marketing Indiana-grown produce will help counter competition from Kentucky-grown produce that is brought into the area by auction/peddlers.

The Vanderburgh County region includes Posey, Gibson, and Warrick counties.

Vanderburgh County		Region
Total Number of Farms (2012)	275 farms	1,651 Farms
Land in Farms (2012)	76,554 acres	673,099 Acres
Average Size of Farm (2012)	278 acres	408 Acres
Value of crops including nursery and	\$32,541,000 (74 th in	\$220.124.000
greenhouse (2012)	Indiana out of 92 counties)	\$320,134,000
Value of Sales in Vegetables, melons,	Not Disclosed	\$1,541,000
potatoes, and sweet potatoes (2012)		\$1,541,000
Value of Sales in Fruits, tree nuts, and	\$35,000 (42 nd in Indiana)	\$35,000
berries (2012)		\$33,000
Value of Sales in Nursery, greenhouse,	\$284,000 (51 st in Indiana)	\$1,700,000
floriculture, and sod (2012)		\$1,700,000
Population (2013)	181,398 people	301,545 People



Fort Wayne

Regional competition between producers from the advent of multiple farmers' markets in the area has put noticeable hardship on the local producers, particularly the Amish community. Much of this conversation became focused on how to champion a food hub, what models would be best based on structure, and how institutional buyers can and need to be involved.



Assets

Fort Wayne is a metropolitan area with large population (over 363,000 people in Allen County), and it has many interested producers and consumers, including institutional buyers at schools and hospitals. 3 Rivers Co-op is located in Fort Wayne. Economic development leaders are looking at the potential for a Northeast Indiana Food Incubator in Bluffton (Wells County).

Challenges

Need a champion to lead regional efforts. Defining target market (rural vs. city, retail vs. community-based assistance). Developing interest and coordination amongst producers. There is distinct disparity between the urban gardener and the rural grower/farmer at this point.

Opportunities

Coordination of planting what institutional buyers need — planning amongst producers to produce volumes necessary for orders. Thinking regionally — multiple counties supplying to a food hub.

ISDA Support

Technical assistance with establishing a regional food hub in collaboration with Purdue Extension.

The Allen County region includes De Kalb, Noble, Whitley, Huntington, Wells, and Adams counties.

Allen County		Region
Total Number of Farms (2012)	1,725 farms	7,329 Farms
Land in Farms (2012)	270,808 acres	1,352,701 Acres
Average Size of Farm (2012)	157 acres	185 Acres
Value of crops including nursery and greenhouse (2012)	\$149,312,000 (8 th in Indiana out of 92 counties)	\$754,164,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$447,000 (41 st in Indiana)	\$1,553,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed (23 rd in Indiana)	\$342,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$3,106,000 (9 th in Indiana)	\$4,377,000
Population (2013)	363,014 people	585,404 People



Columbus

From a consumer standpoint, quality, locality, and price are the most important considerations when deciding to purchase local produce. It would be important to have set standards for the suppliers to participate in the food hub, and could be branded under a statewide umbrella for regional producers. Unfortunately, many smaller producers would likely drop out if told that they needed to be Good Agriculture Practices (GAP) certified, particularly because of the high cost associated with obtaining that certification.



Assets

Columbus has generated interest in local food sourcing in its hospital, and schools, and restaurants. There is an abundance of current farmer's markets, CSA's, co-ops, etc. in the region, and a concentration of activity in Columbus (Bartholomew County) and in Bloomington (Monroe County).

Challenges

GAP training and food safety – could price out a number of smaller producers interested. Number of current produce stands, farmers markets, CSA's, etc. that might view a Food Hub as additional competition and cannibalizing the market. Some nearby competition could be seen as undermining and collaboration is not clear.

Opportunities

Two-tiered approach to a food hub to account for consumer types and producer types, because exclusively having one or the other would stifle growth. For producers with surplus, a food hub provides a channel to get that produce out to consumers and maximize their sale. Set standards that producers would need to follow in order to be branded under a statewide umbrella.

ISDA Support

ISDA can provide informational/technical assistance to get the project off the ground as an initial starting point. Knowledge pertaining to economies of scale would assist local farmers in understanding what their demand potential is and what they can expect to produce and sell to market.

The Bartholomew County region includes Johnson, Shelby, Decatur, Jennings, Jackson, and Brown counties.

Bartholomew County		Region
Total Number of Farms (2012)	623 farms	3,809 Farms
Land in Farms (2012)	171,601 acres	1,057,693 Acres
Average Size of Farm (2012)	275 acres	278 Acres
Value of crops including nursery and greenhouse (2012)	\$85,489,000 (43rd in Indiana out of 92 counties)	\$474,896,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$1,923,000 (15th in Indiana)	\$5,519,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed	\$97,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$146,000 (63rd in Indiana)	\$1,329,000
Population (2013)	79,587 people	382,858 People



Muncie

To have a successful food hub, it would have to be marketed to capture institutional consumers and restaurants. However, one of the biggest challenges to developing a hub is to have someone step up to champion the project and ensure that it works. Support and infrastructure to help farmers scale up their production to supply would be necessary, and is also a barrier to establishing a hub. However, a hub could also do much to provide resources for knowledge sharing and equipment as well as insurance.



Assets

Delaware County has many active producers, and the presence of Ball State University with over 21,000 students provides increased potential for consumers. There is quite a variety of small/new urban producers as well.

Challenges

State University). Getting producers to have proper certifications for selling to institutional buyers. Understanding available warehousing space. Need a champion to lead the effort.

Opportunities

Reliable volumes for institutional buyers (e.g. Ball Sharing of knowledge and equipment as well as resources including insurance for crops. Work with Hoosier Harvest Market to create a sub-hub in Muncie.

ISDA Support

ISDA can assist with raising awareness and educate individuals about the food hub concept through marketing and distribution of educational materials.

The Delaware County region includes Grant, Blackford, Jay, Randolph, Henry, and Madison counties.

Delaware County		Region
Total Number of Farms (2012)	610 farms	4,420 Farms
Land in Farms (2012)	175,266 acres	1,245,098 Acres
Average Size of Farm (2012)	287 acres	282 Acres
Value of crops including nursery and greenhouse (2012)	\$116,998,000 (25 th in Indiana out of 92 counties)	\$578,054,434
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$908,000 (26 th in Indiana)	\$6,550,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed	\$30,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$3,268,000 (8 th in Indiana)	\$11,315,000
Population (2013)	117,484 people	425,574 People



Exploratory Regions

Crawfordsville

The attendees of the Crawfordsville regional input session provided energetic discussion surrounding their readiness for implementation of a food hub. The understanding that Crawfordsville is very much at the mercy of its rural location was exhibited in discussion. Crawfordsville is an immensely charitable community, with many of the farmers there giving their weekly excess products to food banks and local churches.



Assets

A local charitably-minded group (includes participation from Montgomery, Fountain, and Warren counties) wants to encourage healthy eating and local sourcing. Producers donate excess products to food banks and area churches.

Challenges

county. No schools in Montgomery County or neighboring Fountain County buy locally raised food right now. Concerns about pricing models too high for their customer base give existing producers caution.

Opportunities

Rural location; Food insecurity is a real issue in the A seasonal-only food hub might be a good idea to show consumers how to eat seasonally and differentiate a hub in this area. Use hub as an opportunity to create a cultural experience around Indiana food.

ISDA Support

There is an opportunity for ISDA to provide assistance to producers of specialty crops. This group needs support for marketing and general education resources from ISDA about possible food hub creation, templates, and organizing assistance.

The Montgomery County region includes Tippecanoe, Clinton, Boone, Henry, Putnam, Parke, and Fountain counties.

Montgomery County		Region
Total Number of Farms (2012)	732 farms	5,213 Farms
Land in Farms (2012)	286,949 acres`	1,759,279 Acres
Average Size of Farm (2012)	392 acres	3,067 Acres
Value of crops including nursery and	\$147,211,000 (9 th in	¢792.046.000
greenhouse (2012)	Indiana out of 92 counties)	\$783,946,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	Not Disclosed	\$3,555,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed	\$133,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$306,000 (47 th in Indiana)	\$10,920,000
Population (2013)	38,177 people	537,210 Acres



New Albany

There was significant discussion surrounding a need for a community kitchen / commissary in this region for purposes of processing or freezing local produce, which would do much to combat seasonality another heavily discussed obstacle that producers in this region face. There is a significant education factor that needs to be addressed in this region to encourage people to purchase and use locally-grown produce.



Assets

New Albany can utilize and leverage its proximity to Louisville by promoting its active farmers markets in Jeffersonville and New Albany. Once a clear champion is identified, the proximity to urban markets along with existing farmers may make this location and attractive area for adoption with more organization.

Challenges

Need a champion and to educate farmers on the Starlight Vegetable Growers Association - meet value of a food hub. Producers in the area are with them, discuss the concept. either small, new, or already grow and sell wholesale.

Opportunities

ISDA Support

ISDA can support advertising initiatives on Indiana-grown specialty crops, and educating producers and consumers on the food hub concept in the area.

The Floyd County region includes Harrison, Washington, and Clark counties.

Floyd Coun	Region	
Total Number of Farms (2012)	277 farms	2,590 Farms
Land in Farms (2012)	21,463 acres	434,532 Farms
Average Size of Farm (2012)	77 acres	168 Farms
Value of crops including nursery and greenhouse (2012)	\$3,622,000 (90 th in Indiana out of 92 counties)	\$113,269,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$265,000 (47 th in Indiana)	\$2,461,000
Value of Sales in Fruits, tree nuts, and berries (2012)	\$47,000 (36 th in Indiana)	\$224,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	Not Disclosed (84 th in Indiana)	\$2,409,000
Population (2013)	76,244 people	256,125 People

Valparaiso

Valparaiso has noted that there has been lesser attendance to their local farmers markets this in recent years than what is typical, but there is still large community interest in locally sourced food. The Purdue Extension office in Valparaiso often receives inquiries from institutions that simply cannot be provided by local farmers that sell at the farmers' markets. There would need to be a system established that could facilitate these requests and aggregate products from multiple farmers to fulfill the need.²



www.joeyblsphotography.com

Assets

Local Organic Affordable Foods (LOAF) in Chesterton is a potential partner in the area. Producers supplying to Purple Porch Co-op in South Bend, and there is interest from economic development organizations (e.g. Northwest Indiana Regional Planning Commission and Hammond Development Corporation) in the further development of a food hub.

Challenges

Getting multiple communities and producers to collaborate on a model (i.e. where to locate, who pays). Need an identified champion. Most producers in the region don't have the volume or certifications to work with institutional buyers; Current participation with grower groups in Michigan (e.g. Michigan Blueberry Growers Association).

Opportunities

Getting multiple communities and producers to Grant funding for food banks to purchase local – act collaborate on a model (i.e. where to locate, who pays). Need an identified champion. Most Collaboration with economic development producers in the region don't have the volume or organizations to promote agriculture strategy.

ISDA Support

ISDA can help provide a framework, spread the word, and offer opportunities for networking. The Valparaiso area needs support in organizing and gathering interest about the food hub concept.

The Porter County region includes Lake, Jasper, Starke, and LaPorte counties.

Porter Coun	Region	
Total Number of Farms (2012)	481 farms	2,768 Farms
Land in Farms (2012)	120,554 acres	897,773 Acres
Average Size of Farm (2012)	251 acres	324 Acres
Value of crops including nursery and greenhouse (2012)	\$99,542,000 (36 th in Indiana out of 92 counties)	\$444,303,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$2,487,000 (9 th in Indiana)	\$14,508,000
Value of Sales in Fruits, tree nuts, and berries (2012)	\$37,000 (40 th in Indiana)	\$1,702,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$1,549,000 (18 th in Indiana)	\$6,838,000
Population (2013)	166,557 people	825,880 People



² Image retrieved from <u>www.joeyblsphotography.com</u>

Lafayette

In the Lafayette input session, many commented that a co-op structure with producer members, as well as a non-profit entity involved in the cooperative, would be an ideal model to follow for a food hub. This way, overage can be donated directly to that particular non-profit. To that point, the most important detail to assuring the success of a co-op is to establish trust. Producers and consumers alike must trust the aggregation point as well as the administration. Furthermore, institutional purchases would be critical to keep it afloat.



http://www.lafayette.in.gov/

Assets

The Lafayette area can leverage its asset of Purdue University to generate interest in a local food hub. Community and religiously-affiliated organizations have already expressed interest in providing fresh, locally-grown fruits and vegetables to those in need. There is limited interest in the area from producers.

Challenges

GAP certification may potentially limit the number of the producers who can and who are willing or capable to be a part of the system. Warehousing for food storage.

Opportunities

Producers could potentially be interested and feel comfortable with being a part of a food hub, so long as there is an educational piece to encourage them to try in the first place.

ISDA Support

A 'next-step' template and training process for those who are just generally interested or just exploring the food hub concept would be beneficial to Lafayette. Best practices, training, and funding sources – either public or private – would assist in the general education effort.

The Tippecanoe County region includes Benton, White, Carroll, Clinton, Montgomery, Fountain and Warren counties.

Tippecanoe Co	Region	
Total Number of Farms (2012)	702 farms	4,407 Farms
Land in Farms (2012)	220,199 acres	1,867,479 Acres
Average Size of Farm (2012)	314 acres	424 People
Value of crops including nursery and greenhouse (2012)	\$132,619,000 (12 th in Indiana out of 92 counties)	\$1,040,420,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$1,405,000 (20 th in Indiana)	\$1,573,000
Value of Sales in Fruits, tree nuts, and berries (2012)	Not Disclosed	\$11,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$4,324,000 (5 th in Indiana)	\$5,274,000
Population (2013)	180,174 people	329,881 People



Vincennes

This is a larger, commercial-style group of growers that are well established and experienced in the region. Aside from the Amish groups scattered throughout the region, Vincennes is not a region of would-be farmers or small, hobbyist farmers. Many have direct contracts with distributors, such as Piazza, and some already sell to grocery chains.



http://www.vincennescvb.org

Assets

Vincennes is home to the largest concentration of melon producers in the state - selling to both wholesalers and retailers.

Challenges

Lack of interest from producers already selling to Custom cut/package and freeze facility to process major grocery stores. Food hub model is not excess melons not sold to major grocery stores. necessarily appealing – good, profitable model right now; not in a metro area with large customer base; very concerned about combining product with other producers.

Opportunities

ISDA Support

Advocacy and support for the growers is the key to success in Vincennes. ISDA could assist in identifying ways to create, pay for, and distribute an online or hard copy directory of producers.

The Knox County region includes Sullivan, Greene, Daviess, Pike, and Gibson counties.

Knox Coun	Region	
Total Number of Farms (2012)	496 farms	3,974 Farms
Land in Farms (2012)	329,289 acres	1,253,938 Acres
Average Size of Farm (2012)	664 acres	316 Acres
Value of crops including nursery and greenhouse (2012)	\$181,853,000 (2 nd in Indiana out of 92 counties)	\$545,395,000
Value of Sales in Vegetables, melons, potatoes, and sweet potatoes (2012)	\$25,055,000 (1 st in Indiana)	\$32,203,000
Value of Sales in Fruits, tree nuts, and berries (2012)	\$235,000 (11 th in Indiana)	\$244,000
Value of Sales in Nursery, greenhouse, floriculture, and sod (2012)	\$1,130,000 (25 th in Indiana)	\$3,078,000
Population (2013)	37,954 people	170,670 People



Recommendations

1. Launch Virtual Indiana Food Hub Network

Findings from consumer, producer, and wholesaler surveys along with the regional input sessions show interest in regional food hubs and the need for a network to connect their activities throughout Indiana. While interest in the concept is high, the number of launched and functional food hubs is low. However, this report concludes that there is merit in building out a platform for promoting the activities of existing hubs and moving into the planning stages into full implementation.

A virtual food hub will provide the ability for interested parties to maintain communication, continue to grow existing regional food hubs, and launch new regional food hubs. Purdue Extension has started a web-based Indiana Food Hub Network listserv³ that is building upon connections made through the regional input sessions to facilitate and maintain communication between various regions in the state. The listserv is a virtual open public forum that addresses how regional food hubs can be a tool to facilitate producer-to-consumer connections, promote training programs (e.g. Good Agricultural Practices (GAP) certification), and utilize resources for launching and growing food hub operations.

The virtual network will build upon current planning activities and continue to leverage Purdue Extension and its activities through the Rebuilding Your Local Food System program. In 2014, the Food and Growers Association of Laughery Valley in Batesville and the Elkhart County Foodshed Initiative were identified as pilot locations. Planning activities continue in each region and Purdue Extension is beginning work in other parts of the state including Evansville/Southwest Indiana, Fort Wayne, and Muncie.

The virtual Indiana Food Hub Network provides an outlet for connecting these efforts and opportunities for networking and sharing ideas and collaborative approaches to link regional food hub activities. Over time, this can build into a library for best practices and planning resources, a calendar of events, and a dedicated staff available for technical services.

The State of Michigan has found success with this approach. In 2014, the Michigan Department of Agriculture and Rural Development (MDARD) and the Michigan State University Center for Regional Food Systems (CRFS) launched a statewide Food Hub Innovation and Learning Network⁴. Its activities include:

- Convening three to four statewide food hub network meetings per year to create a space for learning and innovation in food hubs and regional food commerce
- Maintaining a statewide listserv and an information page on the CRFS website
- Facilitating a network of local food hub coordinators who are working with local partners to build capacity for food hubs
- Responding to emerging food hub needs through regional and local food hub meetings, conferences, learning sessions, webinars, trainings, and context-specific tool development

³ https://lists.purdue.edu/mailman/listinfo/foodhubin

http://foodsystems.msu.edu/activity/info/michigan food hub learning and innovation network

- Engaging and recruiting food hubs led by traditionally marginalized farmers and organizations representing food and health needs of low-income communities to participate and obtain leadership opportunities in all aspects of the network
- Developing a best practices guide for developing successful Michigan-based food hubs and other regional food businesses (2015).
- Developing a case study guide for a statewide food hub learning and innovation network (published by Center for Regional Food Systems, 2014).5

In 2015, the CFRS has six part-time regional facilitators available to help out with the launch and ongoing operations of regional food hubs. Additionally, they are partnering with the National Food Hub Collaboration (see link: http://www.wallacecenter.org/foodhubcollaboration/) to connect Michigan food hubs and other regional food businesses with resources for educational, technical, and financial support from the around the United States.

ISDA and Purdue Extension have the opportunity to emulate a similar model with the Indiana Food Hub Network. Funding for implementation is not allocated or currently available in 2015 to support a network at the scale of the Michigan Food Hub Innovation and Learning Network. However, it provides an attainable model for consideration by showing the viable linkage of activities between the Michigan Department of Agriculture and Rural Development and Michigan State University. The collaboration was primarily funded with the support of the Michigan-based Kresge Foundation and W.K. Kellogg Foundation. ISDA, Purdue Extension, and other partners have the opportunity to explore national, regional, and state foundations along with federal (e.g. USDA) and state resources to pursue and secure funding for implementation of the Indiana Food Hub Network.

2. Explore Sub-Hub Model for Hoosier Harvest Market

Hoosier Harvest Market in Greenfield, Indiana (Central Indiana) is a well-developed, low start-up cost regional food hub model with an existing online purchasing system. This food hub possesses strong branding and the capability to expand its organization and technology to other regions throughout Indiana. There is an opportunity to establish "sub-hubs" of the Hoosier Harvest Market, a way to build upon a proven infrastructure to launch regional food hubs.

Through this approach, producers within a county or region will join the Hoosier Harvest Market, regularly post the availability/quantity of their specialty crops on the Hoosier Harvest Market website⁶, and coordinate their own local/regional pick-up and drop-off system. If deemed feasible due to producer participation and consumer demand through online orders, a delivery route to and from Greenfield can bring specialty crop orders from their region into the Hoosier Harvest Market distribution channels. Conversely, orders from Central Indiana can be backhauled to their respective regions and distributed back to consumers. Regions with proximity to Greenfield provide opportunities for sub-hubs to launch, including Batesville, Columbus, Fort Wayne, and Muncie. This does not preclude regions from exploring their own branding models for a food hub; it simply provides an entry point and structure that can evolve once producers and consumers are committed to the food hub.

⁵ http://foodsystems.msu.edu/uploads/files/Food_Hub_Network_Info_Sheet_-_8-6-14.pdf

⁶ www.hoosierharvestmarket.com/

Hoosier Harvest Market has begun to offer support to other parts of the state. In 2015, they are collaborating with the Food and Growers Association of Laughery Valley in Batesville to provide outreach and education to producers about diversification into specialty crops in Southeastern Indiana through a grant provided by Cincinnati-based Interact for Health. Additional technical assistance activities have been explored and have the opportunity to be further developed with the Indiana Food Hub Network in place.

3. Streamlining Policies and Procedures

ISDH Requirements for Food Safety and GAP Certification

The ISDA and the Indiana State Department of Health (ISDH) must strengthen the sharing of information about requirements for producers to sell fruits and vegetables to wholesalers.

Currently, ISDH has a dedicated food safety website called the Farm Produce Safety Initiative. This is a new initiative focused on addressing the safety of produce (whole, uncut) sold in the wholesale food distribution chain. It is a proactive approach to prepare for the Standards for Produce Safety being established under the Food Safety Modernization Act (FSMA). As of March 2015, ISDH has two Food Safety Farm Consultants focused on helping producers comply with FSMA standards including:

- Assisting with food safety and conducting food defense vulnerability assessments.
- Conducting environmental assessments and collecting produce surveillance samples for testing.
- Making themselves available for outreach and providing education to individual produce farmers as well as professional trade organizations.

The FDA is still determining how it will impose regulations under the FSMA, and that process is expected to extend into 2016. Certain definitions that affect food hubs, in particular the definitions of "farm" "facility," are under scrutiny by stakeholders and are being clarified by the agency.⁷

On the ISDH website⁸, a Fact Sheet is provided about the requirements for producers who sell fresh produce to grocery stores, restaurants, institutions, and other buyers who are not end consumers. They must complete training in Good Agricultural Practices (GAP), an online course offered by the Purdue Extension (cost was \$30 as of March 2015). This includes successfully passing an assessment to receive course certification. Once certified, the producer can register with ISDH⁹, which is free.

This information is not available on the ISDA website and could be easily integrated into its existing Local Foods website, including marketing the availability of the ISDH Food Safety Consultants and the availability of GAP Training through Purdue Extension¹⁰. Additionally, ISDH is maintaining a list of Registered Wholesale Fruit and Vegetable Growers¹¹. This can be incorporated into the ISDA website and distributed to wholesalers, restaurants, institutions such as hospitals and schools, and other buyers interested in working with registered growers.

Designation of Food Hubs

Currently, ISDH has three categories for State Requirements by Market for Products of Non-Animal Origin:

⁷ http://sustainableagriculture.net/fsma/learn-about-the-issues/do-i-operate-a-facility/

⁸ http://www.in.gov/isdh/25773.htm

⁹ https://forms.in.gov/Download.aspx?id=10956

¹⁰ http://www.distance.purdue.edu/gaps

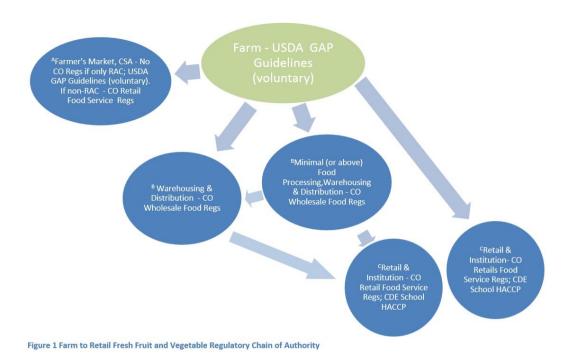
¹¹ https://forms.in.gov/Download.aspx?id=10956

- Producer selling from farm, roadside stand, or at a farmers market.
- Producer selling door-to-door or at a community event.
- Producer distributing from farm to grocery store, restaurant, or institution.

As regional food hubs continue to grow in Indiana, exploration of a fourth category that defines regulations for food hubs would be beneficial to distinguish what is required for producers to participate and clarify ambiguity as to which category to place regional food hubs. An ISDA definition for a food hub is needed for all agencies to understand the new category (see below).

Another option for clarifying food safety regulations would be for ISDH to add more specific language to its existing classifications to include food hubs or other hybrid organizations. For example, the language regarding producers who sell from farms, roadside stands, and farmer's markets could also include direct-to-consumer online sales. Similarly, the language involving distributions to grocery stores, restaurants, or institutions could be amended to include food hubs and community supported agriculture (CSA).

In comparison to Indiana, Colorado food safety regulations also provide three classifications of entry points into the food chain: 1) from farm to the consumer through farmer's markets and CSAs, 2) from farm to wholesale storage, manufacturing, packing, and minimal processing, and 3) from farm to retail and institution outlets, including restaurants, schools, and markets. Each classification has different requirements which must be followed through the regulatory chain of authority (see graphic below). For example, a producer which sells only raw agricultural products at a farmer's market is not subject to state or federal regulation, but if that same producer decides to sell to a warehousing and distribution entity, it must comply with the Colorado Wholesale Food Regulations.



12 http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5105322

ISDA should work with ISDH to either establish a new category of state food safety requirements or amend the current language to more clearly include hybrid organizations such as food hubs. Additionally, both agencies should consider adopting a regulation flow chart such as the one pictured above in order to provide clarity as to which activities are subject to state or federal regulation.

4. Marketing Indiana Specialty Crops and Regional Food Hubs

Indiana Specialty Crops

In 2015, ISDA is revamping its Indiana Grown¹³ brand, a program focused on significantly enhancing Indiana's strong agricultural presence by promoting locally grown foods, local employment opportunities, and economic growth, while at the same time building sustainable communities. This provides an excellent opportunity for ISDA to showcase specialty crops grown in Indiana to consumers making purchases not only through farmers markets and co-ops but larger grocery and retail chains. Seeing the Indiana Grown brand helps educate consumers on making choices and better connecting with fruits and vegetables grown in their home state.

Equally important is for ISDA and its partners to better educate producers about diversification into specialty crops. Understanding entry costs, the potential return-on-investment, and the state's wholesale and direct-to-consumer markets provides knowledge to make informed decisions about diversification. Through Indiana Grown, ISDA can showcase the state's specialty crops and make a strong case for why traditional grain and bean producers have a viable alternative with higher sales. Indiana Grown also provides a way for wholesalers and institutional buyers to be better educated and connected with producers. A listing of producers with the Indiana Grown designation, along with the proper certification through the ISDH, improves linkages between wholesalers and producers so they can expand both expand their market potential in Indiana.

Definition of a Regional Food Hub

There is confusion amongst consumers, producers, and wholesalers/institutional buyers about the definition of a regional food hub. It will be beneficial for ISDA to determine a clear definition that is understood and adopted by state and local government, producers, wholesales, and consumers to promote food hub awareness, improve marketing opportunities for Indiana specialty crops, and clarify the role that a food hub can play in economic development and the greater Indiana food system.

5. ISDA Food Hub Planning Resources

As a state agency with part of its mission to serve as an advocate for Indiana agriculture at the local, state and federal level, regional food hubs are tools for ISDA to connect with specialty crop growers, large and small. Through its Local Foods initiative, a prepared Guide for Food Hub Planning will benefit their outreach efforts. This is included in the appendix and includes:

- Basic food hub models,
- Case studies of successful food hubs using one of the models identified,
- A two-page assessment worksheet,
- A reference guide for zoning restrictions, and
- A reference sheet demonstrating five steps to planning a food hub.

¹³ http://www.in.gov/isda/2513.htm

Appendices

Appendix A

Are We Ready to Form a Food Hub? A Guide to Food Hub Planning

Introduction

The following Guide to Food Hub Planning is intended to provide a brief overview of basic food hub models and the beginning tools for assessing readiness to move forward with a food hub project. It is important to note that food hubs can and should be as unique as the farmers, community leaders, and consumer advocates that organize them. Thus, the models provided are to be used as a guide to enable discussion about the pros and cons of various components and types of structure that would benefit a given location. In truth, there is no right or wrong way to organize a food hub; you will see that many models overlap and contain elements of several successful hubs. The Guide is also not a replacement for further in-depth assessment of feasibility for a local hub and is intended to provide the basic elements and considerations necessary for planners to undertake more serious consideration.

Who Should Use this Guide

The audience for this guide is primarily food hub planners and those interested in supporting the development of a food hub in their area. However, planners come from varied backgrounds and bring unique perspectives to the formation of food hubs, and can include farmers seeking marketing opportunities, members of local government, economic development professionals, consultants to food hub organizers, and even consumers seeking to understand food systems.

Components of the Guide

The Guide includes four components:

- Basic food hub models.
- Case studies of successful food hubs using one of the models identified.
- A two-page assessment worksheet.
- A reference sheet demonstrating five steps to planning a food hub.

Basic Food Hub Models

Three unique food hub models are included in the next section in chart form. For each model, there is a brief description of the concept behind the model and some possible scenarios where the model has been successfully deployed. Each model contains points of the following components:

- Target customer
- Distribution methods
- Organizational/entity structure
- Operational design
- Infrastructural components (if any)

- Type of product aggregation
- Other possible services

Case Studies

Following the modeling section are three case studies of food hubs active today. None of the food hubs are located in Indiana, yet readers will recognize parts of each of these examples as part of active Indiana food hubs today or appealing aspects that Indiana project developers may look to implement here. The brief description provides only a sketch of how each is organized, what their primary goals are, and how they sell to the market. Interested readers should access more information by checking out the websites noted with each study.

Assessment Worksheet

The assessment worksheet is meant for planners to use in gaging the general readiness to move forward with food hub planning. It is a tool best used early in the process to determine potential barriers to organizing and the areas where the most immediate opportunities exist. This tool could also be easily modified for use with farmers to determine their readiness to supply the food hub once formed and could then be offered in a survey form at call-out meetings during the planning stage.

APPLE Five-Phase Food Hub Planning Process

The Guide also includes a five-phase food hub formation process called APPLE that demonstrates the organizational phases of putting together a food hub. With very general timeframes provided to help frame up the launch of a hub, APPLE shows what steps need to be taken within a twelve-month period. It is important to note that many hubs take longer than twelve months to launch and sometimes several years to be successful.

Basic Food Hub Models

Model One – Virtual Food Hub

Concept: Online hubs are a connection point for farmers and consumers to meet and transact business in an online format. For hubs that begin only with online ordering and no delivery (often with pick up points) and no physical warehouse, this model can be simpler to employ, have a lower up-front investment, and allow flexibility to expand the range of services with increased profits. This model can also enable an inseason only approach to fresh products (if desired) as the grower can update their own inventory. Most all hubs handle marketing of the product to target customers on behalf of sellers.

			Target Customers		
	Primary: Retail consumers	Secondary: Local restaurateurs seeking smaller volumes	Secondary: Specialty shop	Secondary: Schools seeking in season feature items	
Distribution Method (s)	Buyers: Pick-up locations in established range	Producers: Farmers bring product to one point	May ultimately include delivery to customer	With more members/volunteers, more pick up locations can be added	Members use own vehicles or hub may own trucks
Organizational Entity Structure	Farmer-owned cooperative or Investor-owned or individual farmer- owned	Membership-based with fee going to hub for working capital	For-profit, although some operate as non-profits		
Operations and Management	Employee (s)-often one part-time needed at start up	Volunteers-members typically meet volunteer commitment minimums	Board of Directors or officers needed for governance of co-op model		
Sales Structure	Online ordering only	Limited or no contract minimums with producers	Producers update inventory themselves	Buyers pay the hub via credit card, hub makes payment to producer	Could be subscriptions based sales
Infrastructure	Facilities are limited, especially at launch	Free or community based site for gathering orders often used. Location describe	One farmer's location could be used to gather orders, if convenient to pick-up locations	Storage, if any, usually limited to just a few days	Re- packaging/processing limited
Farmer Aggregation Process	Farmers become members or sign sales agreement	Farmers set level of product they desire to sell	Sales are not guaranteed to by food hub	Farmers get sold items to aggregation point for drop off to buyers by food hub	
Other Compatible Services	GAP Certification	Training and workshops	Retail store as profit allows	Processing, Packaging	

Model Two – Wholesale Food Hub

Concept: Wholesale and institutional customers may present the most challenging market segment for early food hub planners to understand and work with. Yet, the opportunity for greater volume, guaranteed contracts for producers, and the ability to plan in advance for specialty crops grown to satisfy the hub make this customer attractive. In a wholesale model, the hub takes more control of product and the selling process with the end customer. Farmers may have less direct interaction with the end customer but will often be able to plan well in advance what they can grow to satisfy the hub's needs based on sales agreements hub has made with customers.

	Target Market					
	Primary: wholesale food sellers	Primary: institutions like schools, hospitals, colleges, etc.	Primary: Restaurants	Secondary: consumers		
Distribution Method (s)	Buyers: Delivery is usually a must	Sellers: may have product picked up at farm by hub	Sellers: may bring product to hub			
Organizational Entity Structure	Farmer-owned cooperative or Investor- owned or individual farmer-owned	Membership-based with fee going to hub for working capital	For-profit, although some operate as non-profits			
Operations and Management	Employees are needed for on-site, trucking, packaging, sorting, ordering	Volunteers needed; members may meet volunteer minimums	Board of directors for governance needed for co-op model			
Sales Structure	Online ordering	Phone ordering	Possible on-site purchasing	Farmers paid by hub, hub paid by customer		
Infrastructure	Facilities will need storage, cooling, sorting areas	Delivery trucks with refrigeration will be needed				
Farmer Aggregation Process	Farmers become members or sign contract agreement	Hub directs type and quantity of produce needed	Farmer often knows price for items before planting			
Other Compatible Services	GAP Certification and Training	Training and Workshops	Backhauling	Processing and packaging and preserving		

Model Three – Community Food Hub and Innovation Center

Concept: Community projects have the opportunity to provide an immediate larger impact in terms of jobs, awareness, and support because of the variety of partners often involved. These types of hubs also take careful planning, sometimes several years to launch, and more capital when a broad range of services and products are offered. Community hubs often take the role of local economic development organizations and may contribute to broader social missions of the organization's that organize them. Because of the diversity in type of products and services, these hubs may provide the most reach to consumers.

			Target Market		
	Primary: Retail consumers	Primary: Food entrepreneurs seeking space	Primary: Restaurateurs	Primary: wholesale distributors	Secondary: institutional customers
Distribution Method (s)	Buyers: on site shopping or delivery via trucks	Buyers: pick up locations	Sellers: producers usually bring products to hub		
Organizational Entity Structure	Cooperative	Often non-profit	Often community or municipal-owned		
Operations and Management	Employees are needed for on-site, trucking, packaging, sorting, ordering	Volunteers needed; members may meet volunteer minimums	Board of directors for governance needed	Volunteers may serve as food educators to visitors	Municipality may supply employees or volunteers to support hub
Sales Structure	Online ordering	On-site purchasing	Hub may also profit from tenants seeking kitchens/storage/service s	Sales could be subscription-based	Customers pay hub, hub pays farmers
Infrastructure	Facilities will need storage, cooling, sorting, processing, and packaging, areas	Delivery trucks with refrigeration will be needed	Certified kitchen is often a component	Gathering facilities such as meeting space often needed	
Farmer Aggregation Process	Farmers become members or sign contract agreement	Hub may directs type and quantity of produce needed, but may not	Farmer may maintain own inventory via online order system	Farmers bring items to drop off as sold	
Other Compatible Services	GAP Certification and Training	Community gathering place/center	Training and Workshops	Classes for consumers	On-site farmers market

Regional Food Hub Case Studies

Case One: Virtual and Farmer-Owned Food Hub, Bella Bean Organics, Durham, NC

Website: www.bellabeanorganics.com



The Bella Bean Organics food hub is a combination farmerowned hub that offers both virtual ordering and access to other services provided by the owners including a CSA (community supported agriculture). Based in North Carolina, this company is a for-profit model that is investor owned by its

founders who also have a small farm. While they supply some of the products, much is sourced from nearly 50 other farmers and 'artisans' in their area. The model thrives around home delivery and a subscription service that entails the customer signing up for the box size and volume they want each week. Customers can also order various products from the hub à la carte.

The philosophical model of the hub is to promote and sell organic or sustainably raised products. The delivery area is growing and the website reports that it now includes North Carolina, South Carolina, Virginia, and Washington, D.C. Nonlocal products are also offered, though that is clearly noted on the ordering site. Farmers that supply the hub receive a price directly from the hub and the hub pays them for the product. While the various farmers are listed on the website and there is short paragraph about their operations, there a no pictures or website links; it's clear that Bella Bean owns the contact with the end customer.

Case Two: Wholesale and Delivery-Focused Food Hub, Local Food Hub,

Charlottesville, VA

Website: www.localfoodhub.org



Aptly named Local Food Hub, this organization is a non-profit hub that aims to provide delivery to wholesale and restaurant customers in Virginia. Because wholesale selling is one aim, farmers work

with a grower services specialist to help them understand the needs of the food hub and plan their volume. The hub owns trucks and delivers to its customers. A target customer base includes hospitals and longer term care facilities.

The hub's stated mission is to support family farmers and develop new markets for them. They work with around 70 farmers in the area, and one unique perk is access to free training and certification programs offered to farmers to help them comply with food safety regulations. Local Food Hub endorses neither organic nor conventional farming, and both types of operations sell to the hub. A unique profit center for the hub includes consulting services for would-be food hub planners and also fees for speaking and tours of their aggregation site.

Case Three: Community-Based Food Hub, Food Enterprise Center, Viroqua, WI Website: www.veda-wi.org



The Food Enterprise Center in Viroqua, Wisconsin is an example of a food hub acting as an economic development driver for an entire community. This hub was founded in response to the closing of a key employer in the community, NCR. Following that closure, the Vernon Economic Development Association (VEDA) purchased the property and building of the old factory and turned the 100,000 square-foot space into a community food hub and kitchen. The site includes a variety of tenants in food and sustainable agriculture innovation, including the food hub itself that aggregates specialty crops from

about 60 area farms.

The hub contracts with growers at the beginning of the planting season. Working with their buyers, the hub establishes pricing for produce up front, allowing growers to receive payment right out of the field. For those products requiring further processing, the Center offers kitchens, freezing/cooling, and processing equipment.

The hub operates as a non-profit and is run by a professional Executive Director as well as paid staff. It receives its funding from memberships, grants, and gifts. They organization has a strong donor network and active fundraising effort to achieve this. The website reports that the Food Enterprise Center employs 15 people.

Are We Ready to Form A Food Hub? Assessment Worksheet for Food Hub Developers

Instructions: The following questions can be used by food hub organizers when determining the initial level of readiness to organize. There are no right or wrong answers to the questions and there are more considerations beyond these when starting any new venture. However, this assessment tool provides a set of initial questions to support organizers in gathering partners and resources to move the project forward.

Complete the following short answer questions to the best of your ability. It may be helpful to committees to answer questions independently first and then use the response as a discussion guide.

Organizational Status:

- 1. Have you established connections to other supporters, advocates, farmers, and customers?
- 2. Has that outreach shown a high level of interest?
- 3. Is there a high level of social enthusiasm or entrepreneurial drive to develop a food hub?
- 4. Has a key champion(s) been identified to lead the organizational phase with commitment?
- 5. Are partners identified at all key organizations that need to be part of the process?
- 6. Have any organizational meetings been held to raise awareness?

Philosophy and Need:

- 1. What is the core purpose of the food hub?
- 2. What needs does a food hub serve in the community?
- 3. Why is now the time to form a food hub?
- 4. What benefits does a food hub bring to farmers, consumers, and the greater community?

Producer Aggregation:

- 1. Are area farmers generally producing specialty crops, conventional crops, or a mix?
- 2. Is there perceived interest among farmers in raising specialty crops for a food hub?
- 3. Is the population of farmers growing or declining in the area?
- 4. Are area farmers actively participating in complimentary activities such as CSAs and farmers markets?
- 5. Have organizational call-out meetings with farmers been held?

Marketplace Readiness:

- 1. Is there knowledge about food hubs and local food systems in the community?
- 2. What competing entities already exist already in the area?
- 3. What complimentary entities exist in the area and how will a food hub impact them?
- 4. Is there a strong, diverse customer base for locally-raised food?
- 5. Have formal market research studies been conducted?

Financial Questions:

- 1. What does the access to capital look like to form a food hub?
- 2. What partnerships need to be formed to seek capital?

3. Can finances be obtained to support business planning, feasibility assessments, and organizational formation?

Location and Facilities:

- 1. Have suitable and affordable facilities been identified for a location?
- 2. What delivery and transportation options exist?

Identify	and	List	Barriers	to a	Food	Hub:
-----------------	-----	------	-----------------	------	------	------

List the	top	five	(5)	barriers:

- 1.
- 2.
- 3.
- 4.
- 5.

Identify and List Key Opportunities for a Food Hub:

List the top five (5) opportunities:

- 1.
- 2.
- 3.
- 4.
- 5.

Zoning Lessons Learned Regarding Food Hubs: A Study from the Michigan Food Hub Learning and Innovation Network

Zoning restrictions, along with the political navigation required to change them, can be a crucial barrier to entry for food hub entrepreneurs who are looking to establish their business. The Michigan Food Hub Learning and Innovation Network put together a "lessons learned" document¹⁴ based on zoning discussions that took place in Battle Creek and Washtenaw County.

Key findings include:

- Most industrial zoning will satisfy the needs of a food hub operation.
- Food hubs which intent to offer direct marketing or public gatherings will need to consider whether commercial zoning is more appropriate for their business.
- Most zoning ordinances do not specifically list food hubs; however, they often provide for the same activities in which foods hubs might engage such as processing, warehousing, and retail sales.
- Sites which do not allow for a food hub operation may be requested for a rezoning or a zoning text amendment, though this can be costly and time consuming.
- If a site does not allow a use at all due to a zoning ordinance, a municipal reviewing body may consider a proposal for a change in zoning policy. This process varies by community.

¹⁴ http://foodsystems.msu.edu/uploads/files/fh-zoning.pdf

'APPLE' Five-Phase Food Hub Planning Process: Idea to Implementation in Twelve Months

Assemble: Share ideas, research options and engage	<u>Plan:</u> Assess interest, feasibility, and	Proceed: Formalize and	Launch: Aggregate Producers and	Evaluate: Grow, learn, expand, and build a sustainable organization
advocates	target markets	organize an	secure	
Local champion begins connecting with others	Conduct formal market research	entity Create organizational committee; set mission	Solicit producers to supply hub	Evaluate financials for pitfalls, successes, budgeting for year
Research options for food hubs	Gain professional insights for formation and business planning	Determine entity desired	Discuss food safety compliance and crop mix	Survey customers for changes, updates, and to confirm commitments
Connect with other food hubs and possible networks	Evaluate all research results	Determine membership or contracting design	Begin marketing to retail consumers	Evaluate branding and marketing for improvement
Hold initial interest and information meetings	Build initial projections for cost, markets, producers	Decide core services and infrastructure	Procure contracting for institutional customers	Work with producers to improve product aggregation and planning
Begin building awareness and enthusiasm with producers and customers	Determine feasibility of moving forward and timeframe	Finalize projections	Establish sales and ordering, and distribution platforms	Discuss future objectives and services
Months 1-2	Months 2-6	Months 5-7	Months 7-12	Month 12 and beyond